R. WHITE.

REPEATING FIREARM.

No. 12,648. Patented Apr. 3, 1855.

Fig: 1.

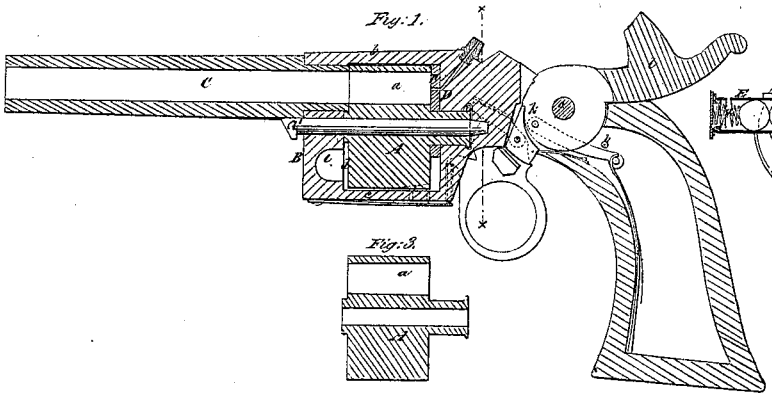


Fig: 4.

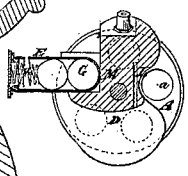


Fig: 5.

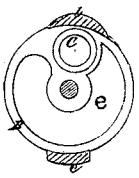


Fig: 3.

Fig: 2.

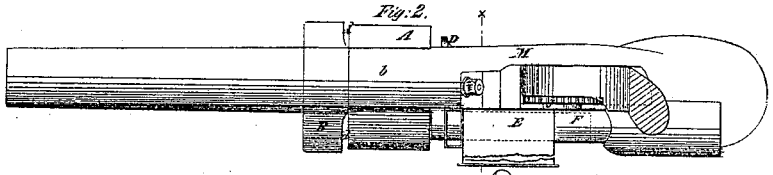
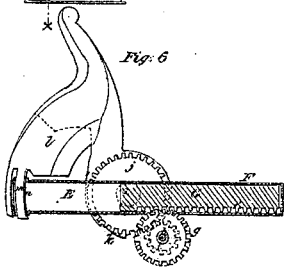


Fig: 6



UNITED STATES PATENT OFFICE.

ROLLIN WHITE, OF HARTFORD, CONNECTICUT.

IMPROVEMENT IN REPEATING FIRE-ARMS.

Specification forming part of Letters Patent No. 12,648, dated April 3, 1855.

To all whom it may concern:

Be it known that I, ROLLIN WHITE, of the city and county of Hartford, and State of Connecticut, have invented certain new and useful Improvements in Repeating Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a longitudinal section of a pistol constructed according to my invention; Fig. 2, a top view of the same with the head of the hammer cut off to show the parts below it. Fig. 3 is a central section of the rotating chambered cylinder. Fig. 4 is a transverse section taken in the line *x x* of Figs. 1 and 2, looking from the back toward the muzzle. Fig. 5 is a transverse section taken directly in front of the chambered cylinder toward the muzzle. Fig. 6 is a section of the magazine and charger.

Similar letters of reference indicate corresponding parts in the several figures.

This invention, which, to distinguish it from several other of my improvements in fire-arms, I will denominate "No. 4," relates to fire-arms having the rotating many-chambered cylinder.

It consists, first, in extending the chambers through the rear of the cylinder for the purpose of loading them at the breech from behind, either by hand or by a self-acting charger, from a magazine placed in rear of the cylinder.

It consists, secondly, in a guard so applied in front of the chambered cylinder as to receive or stop the balls, but to allow the escape of the exploded powder if the charge in any of the chambers not in line with the barrel should be exploded by lateral fire or any accident.

It consists, thirdly, in the combination of a charging-piston with the hammer in such a way that by the drawing back or raising of the hammer to cock the lock the said piston is caused to drive a cartridge into one of the chambers from a magazine placed behind it. This improvement is applicable to other kinds of breech-loading fire-arms besides those employing a rotating chambered cylinder.

It consists, fourthly, in an attachment to the hammer for the purpose of closing the magazine perfectly during the discharge of the piece to protect the charges in the magazine from the effects of lateral fire.

A is the rotating chambered cylinder, having the chambers *a a* bored right through it, and made slightly conical, with the smallest part in front, in order that a cartridge may be inserted easily at the back, but that the ball may fit tight when it arrives in its place and not go through till the charge explodes.

a' is the pin upon which the breech rotates, the rotation being effected, in a way not necessary to be here explained, by a tooth attached to the trigger.

L (see Fig. 4) is a recess made in the side of the stock M, to afford sufficient room in rear of the cylinder, opposite one of the chambers *a a*, for the insertion of a charge by hand at the rear opening of the said chamber.

p, Fig. 1, is a fixed breech-piece, arranged opposite the barrel, behind the cylinder, to serve as a breech to that chamber which happens to be in line with the barrel.

B is a guard for the purpose of receiving or stopping the balls in case of accidental explosion in any chamber not in line with the barrel. It consists of a stout metal plate made all in one piece with or firmly secured to the straps *b* and *c*, which connect the barrel C' with the recoil-shield D, and covering the whole front of the rotating cylinder. I prefer to arrange this guard at a short distance from the cylinder, so as to leave a space, *d*, (shown in Figs. 1 and 2,) for the escape of the exploded powder in front of the cylinder, and to make a recess, *e*, (see Figs. 1 and 5,) in its face, into which the ball or balls from any or all of the chambers not in line with the barrel may enter when the charges explode, to allow the free escape of powder. The guard may, however, be made without the above-named recess in its face, and may fit close to the front of the cylinder if a free escape for the exploded powder is provided for by leaving suitable open space in the rear.

E is the magazine, which consists of a box, in which the cartridges are laid side by side parallel with the bore of the barrel, to be forced one by one sidewise by a spring, *q*, or other means into the charging-tube F, which stands behind and in line with one of the chambers of the cylinder. The charging-piston G, which

fits the tube F, is furnished with a rack, *f*, gearing with a toothed wheel, *g*, (see Fig. 6,) which is fast on the same spindle or arbor *h* as another toothed wheel, *i*, which gears with a third toothed wheel, *j*, secured firmly to the tumbler *k* of the hammer *l*. The raising of the hammer to cock the lock gives the wheels *j i g* such a movement as to throw forward the piston G to drive a cartridge which has been supplied to the tube from the magazine into the chamber of the cylinder with which it is in line. The falling of the hammer draws back the piston far enough to allow another cartridge to enter the charging-tube from the magazine.

m is the attachment to the hammer for the purpose of closing the mouth of the magazine during the discharge. This attachment is only shown in Fig. 6, being cut away in Fig. 1, which only shows the hammer proper. It may be made all in one piece of metal with the hammer. Its face *n* forms an arc concentric with the arbor or spindle *o* of the hammer, or very slightly eccentric thereto, and the exterior of the mouth of the magazine is made of a corresponding form, in order that they may fit close together. The face *n* may be covered with an elastic packing to close the mouth of the magazine more securely. As the hammer falls the attachment covers the mouth of the magazine before the priming is exploded, and thus serves as an efficient protection to the magazine.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. Extending the chambers *a a* of the rotating cylinder A right through the rear of the said cylinder for the purpose of enabling the said chambers to be charged at the rear either by hand or by a self-acting charger, substantially as described.

2. The application of a guard to cover the front of all the chambers of the cylinder which are not in line with the barrel, or any number thereof which may have been loaded, combined with the provision of a proper space for the lateral escape of the exploded powder, substantially as herein described, whether the said space be between the cylinder and guard or in rear of the cylinder, and whether the said guard be constructed with a recess, *e*, to receive the balls or be of such form as merely to stop the balls.

3. Combining a charging-piston, G, with the hammer by means of gearing, substantially as described, or by the equivalent thereof, in such a manner that by raising the hammer to cock the lock the piston is moved toward the chambered cylinder to force a cartridge from the magazine into one of the chambers thereof, and by the falling of the hammer the piston is withdrawn to allow a new cartridge to be supplied, ready to be driven into the next chamber of the cylinder as the hammer is again raised to cock the piece, as herein fully set forth.

4. Furnishing the hammer with an attachment, *m*, by which in the act of falling it may close the mouth of the magazine, substantially as herein described, before exploding the priming, and thus protect the charges within the magazine from ignition.

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Witnesses:
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